



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/932,229

08/17/2001

Kai Ahrens

30014200-1008

4840

58328

7590

05/03/2006

SONNENSCHN NATH & ROSENTHAL LLP  
FOR SUN MICROSYSTEMS  
P.O. BOX 061080  
WACKER DRIVE STATION, SEARS TOWER  
CHICAGO, IL 60606-1080

EXAMINER

REILLY, SEAN M

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/932,229	AHRENS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sean Reilly	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/20/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This Office action is in response to Applicant's amendment and request for reconsideration filed on February 6, 2006. Claims 1-48 are presented for further examination. All independent claims have been amended.

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on October 20, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Drawings***

2. The replacement drawings submitted December 14, 2005 have been accepted.

#### ***Applicant Admitted Prior Art***

3. Applicant attempts to traverse the Official Notice discussed with regard to claims 4, 5, 18, 19, 36, 42, 43, and 45 (See Applicant response pgs 14 and 15, December 14, 2005). As Applicant is aware to adequately traverse an Examiner's statement of Official notice, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. Applicant failed to recite any such statement as to why the noticed fact is not considered to be common knowledge or well-known in the art and thus Applicant's attempted traverse is not adequate. Accordingly the well-known in the art statements as recited on pgs 11

Art Unit: 2153

and 12 of the final office action mailed October 6, 2005 is taken to be admitted prior art because the traverse was inadequate (See MPEP 2144.04 Section C).

4. Applicant also asserts that the CRC and ADLER checksums reference in ¶ 61 of Applicant's disclosure is not an admission by Applicant that both the CRC and ADLER checksums were well known in the art at the time of Applicant's invention (See Applicant response pgs 14 and 15, December 14, 2005). Applicant has failed to provide any argument or rationale as to why this discussion does not amount to an admission of prior art. Examiner maintains that this discussion in ¶ 61 of Applicant's disclosure amounts to an admission by Applicant that both the CRC and ADLER checksums were well known in the art. If Applicant is admitting that these checksums were not well known in the art at the time of Applicant's invention then a 112 1<sup>st</sup> ¶ enablement rejection may be required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**5. Claims 21, 23-36, and 38-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claims 15-28 and 41-48 are not limited to tangible embodiments. The claims each recite "a computer readable medium." In view of Applicant's disclosure, specification ¶ 63, computer readable medium readable medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., hard disks) and intangible embodiments (e.g., a signal). As such, the claims are not limited to statutory subject matter and are therefore non-

Art Unit: 2153

statutory. Note the term “tangible” as used in claims 15-28 is not given patentable weight since artisans in the art have various options as to the scope of this term, some which define signals as tangible mediums. Nonetheless signals are not statutory subject matter as set forth in the latest “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (signed October 26<sup>th</sup>, 2005) which further clarifies computer-related nonstatutory subject matter on pages 50-57.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 1. Claims 1-3, 6-13, 15-17, 20-27, 29, 31, 34, 35, 37, 40, 41, 44, and 46-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Acharya et al. (U.S. Patent No. 6,826,593, hereinafter “Acharya”).**

In considering claim 1, Acharya discloses a method in a data processing system for facilitating reuse of data blocks, the method comprising the steps of:

receiving from a client program a data block request identifying a data block (col. 8, lines 58-59, “user requests a Web page,” note that the webpage request is a request for several data blocks, i.e. the user requests each image data block contained within a webpage);

obtaining constituent data that comprises the data block (i.e. the server sends a materialized image version, see inter alia Col 9, lines 59-62 or Col 10, lines 27-30) and deriving a data block identifier from the constituent data (multiresolution URL “MRURL” including information about the image resolution/format which is derived from the image, see inter alia Col 8, lines 51-55 and Col 9, lines 40-43);

determining whether the data block is a registered data block in a collection of data blocks using the data block identifier (col. 9, lines 4-5, “if the user has previously registered a preferred client default setting”; col. 9, lines 50-53, “proxy checks the cache to determine if the selected version is resident”);

when the data block is not a registered data block, registering the data block in the collection of data blocks (col. 9, lines 38-41, “user then selects a version of the target file,” thereby registering the data block);

generating a registration reference for accessing the data block (col. 9, lines 45-46, “MRURL”); and

returning the registration reference to the client program (col. 9, lines 45-48).

In considering claim 2, Acharya further discloses that the step of receiving comprises receiving from the client program a request data object comprising a data block identifier and at least one of the data block and a pointer to the data block (col. 8, lines 64-66, i.e. the client requests the embedded files by referring to a file identifier which is a pointer to the file).

In considering claim 3, Acharya further discloses that the step of deriving comprises the step of generating a codeword based on the constituent data (col. 7, lines 51-65, describing deriving the codewords “img256.gif,” etc.).

In considering claim 6, Acharya further discloses that the step of deriving further comprises the step of deriving the data block identifier based additionally on data block characteristic information (col. 7, lines 51-65, wherein the identifier is based on image resolution).

In considering claim 7, Acharya further discloses that the collection of data blocks is a linked list of data blocks (col. 8, lines 62-63, “links”).

In considering claim 8, Acharya further discloses that the step of receiving comprises the step of receiving the data block request at a registration server from a requesting program (col. 8, lines 58-67, wherein the client browser makes a request to the registration server).

In considering claim 9, Acharya further discloses that the step of registering comprises the step of adding the data block to a linked list of additional data blocks that comprises the collection of data blocks (col. 9, lines 1-5, 42-53).

In considering claim 10, Acharya further discloses that the step of generating a registration reference comprises the step of generating one of a pointer and a handle to the data block (i.e. a “link” or “pointer”).

In considering claim 11, Acharya further discloses that the step of generating a registration reference comprises the step of generating a registration handle object comprising a reference to a resource allocated for the data block (i.e. a “MURL” is a reference to the memory location of the data block).

In considering claim 12, Acharya further discloses that the resource is one of a memory area allocated for the data block and a process started in connection with the data block (i.e. “MURL”).

In considering claim 13, Acharya further discloses that the step of determining comprises the step of comparing the data block identifier against additional data block identifiers for additional data blocks in the collection of data blocks (col. 9, lines 49-53, wherein the system checks if the file is in the cache by searching the file identifier against a list of stored files).

In considering claims 15-17 and 20-27, these claims present a computer readable medium for performing the same steps as claims 1-3 and 6-13 respectively, and are thus rejected for the same reasons.



In considering claims 29 and 31, the limitations in these claims are similar to those already discussed with regard to claims 1-13, and are disclosed in the same cited sections of Acharya discussed above.

In considering claims 34, 40, and 41, these claims present data processing systems and a computer readable memory device for performing no additional steps over claims 1 and 9-11, and are therefore rejected for the same reasons.

In considering claim 35, this claim contains the same limitations as claim 3, and is thus rejected for the same reason.

In considering claim 37, Acharya further discloses an analysis component comprising instructions that examine the registration handle object to determine whether a client terminal received the requested data block in response to an earlier request (col. 9, lines 49-63, wherein the file version indicator is checked to determine if the requested data block is in the cache in response to an earlier request).

In considering claim 44, Acharya further discloses that the registration data object further comprises at least one of a client terminal identifier and a client terminal request identifier (col. 9, line 5, "registered a preferred client default setting").

In considering claim 46, Acharya further discloses that the registration data object further comprises a plurality of client terminal identifiers each associated with a client terminal request identifier (i.e. client default settings for each client).

In considering claim 47, Acharya further discloses that each registration data object further comprises a registration data object pointer for forming a linked list of registration data objects (col. 8, lines 58-67, "links or pointers").

In considering claim 48, Acharya further discloses that each registration data object further comprises a data block reference to a registered data block (i.e. "links" or "pointers").

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### **2. Claims 30, 32, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acharya.**

In considering claims 30, 32, and 39, Acharya further discloses that duplicate resources (i.e. temporary memory locations in the cache) can be allocated to the requested data block (col. 9, lines 59-64, wherein an old version of the file can be in the cache along with a new version). Although Acharya does not disclose releasing the duplicate resources, the fact that the old

Art Unit: 2153

version has no use because it is not current would suggest to one having ordinary skill in the art to delete the old version from the cache, thereby releasing the duplicate resources allocated to the requesting data block (i.e. analyzing the memory locations to see if a handle points to a new version of the data block stored in a new memory location, and releasing the old data block memory location if it does), in order to free up memory space in the cache. Therefore, it would have been obvious to release duplicate resources allocated to the requested data block in the system taught by Acharya. Such release would naturally come as a result of the resource reference provided in the registration handle object (i.e. after receiving the new version in the cache), as further claimed in claim 39.

**3. Claims 4, 5, 18, 19, 36, 42, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acharya, in view of what is well known in the art.**

In considering claims 4, 5, 18, 19, 36, 42, 43, and 45, although the system taught by Acharya discloses substantial features of the claimed invention, it does not disclose that the data block identifier is derived in part based on a CRC or ADLER codeword, or a sequential request number. Nonetheless, Acharya does disclose that the link identifier is sent over a network (col. 8, lines 63-67). For the link to be sent across a network, it will necessarily need to be placed in an Internet packet. Examiner takes Official notice that the Web generally uses TCP/IP or UDP/IP packets and often uses Ethernet, and further takes Official notice that TCP and UDP use a 16-bit checksum sequential number field, while Ethernet uses CRC to ensure data reliability. Applicant further admits that the CRC and ADLER checksums are well known in the art (see ¶ 61 of specification). Thus, given the knowledge that TCP or UDP and Ethernet can be used to

Art Unit: 2153

transport the data blocks taught by Acharya, and further given the knowledge that CRC, ADLER, and 16-bit checksums are well-known techniques, a person having ordinary skill in the art would have readily recognized the desirability and advantages of including the CRC or ADLER checksums or a sequential 16-bit number in the identifier taught by Acharya to ensure that the data block identifier is correctly sent over the network. Therefore, it would have been obvious to include the CRC or ADLER checksum or the sequential number in the data identifier taught by Acharya.

### *Response to Arguments*

In response to Applicant's request for reconsideration filed on December 14, 2005, the following factual arguments are noted:

- a. Acharya failed to disclose deriving a data block identifier from the constituent data that comprises the requested data block.

In considering (a), Examiner respectfully disagrees with Applicant's argument. Note the above mapping of the claims utilize a slightly different claim mapping compared to the previous final rejection.

As previously indicated, Examiner does not equate Acharya's requested web page to Applicant's requested data block. Rather the Examiner equates the webpage request to be a request for several data blocks, i.e. the user requests each image data block contained within a webpage. Thus the requested data block may be any image data block contained within the requested webpage. Further Acharya's system obtains constituent data that comprises the data

Art Unit: 2153

block (i.e. any materialized image contained within the webpage) and derives a data block identifier from the constituent data (multiresolution URL "MRURL" including information about the image resolution/format which is derived from the image, see inter alia Col 8, lines 51-55 and Col 9, lines 40-43).

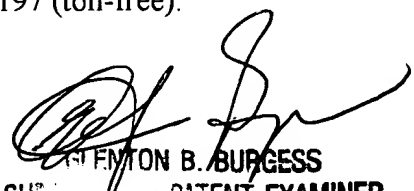
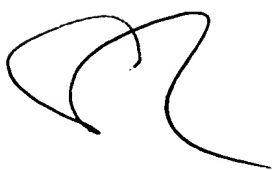
### *Conclusion*

6. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GLEN BURGESS  
SUPERVISOR  
PATENT EXAMINER  
TECHNOLOGY CENTER 2100